60th birthday unless there is another pilot in the flight deck crew who has not yet attained 60 years of age.

[Doc. No. 6258, 29 FR 19212, Dec. 31, 1964, as amended by Amdt. 121–144, 43 FR 22646, May 25, 1978; Amdt. 121–344, 74 FR 34234, July 15, 2009]

§ 121.385 Composition of flight crew.

- (a) No certificate holder may operate an airplane with less than the minimum flight crew in the airworthiness certificate or the airplane Flight Manual approved for that type airplane and required by this part for the kind of operation being conducted.
- (b) In any case in which this part requires the performance of two or more functions for which an airman certificate is necessary, that requirement is not satisfied by the performance of multiple functions at the same time by one airman.
- (c) The minimum pilot crew is two pilots and the certificate holder shall designate one pilot as pilot in command and the other second in command.
- (d) On each flight requiring a flight engineer at least one flight crewmember, other than the flight engineer, must be qualified to provide emergency performance of the flight engineer's functions for the safe completion of the flight if the flight engineer becomes ill or is otherwise incapacitated. A pilot need not hold a flight engineer's certificate to perform the flight engineer's functions in such a situation.

[Doc. No. 6258, 29 FR 19212, Dec. 31, 1964, as amended by Amdt. 121–178, 47 FR 13316, Mar. 29, 1982; Amdt. 121–256, 61 FR 30434, June 14, 1996]

§121.387 Flight engineer.

No certificate holder may operate an airplane for which a type certificate was issued before January 2, 1964, having a maximum certificated takeoff weight of more than 80,000 pounds without a flight crewmember holding a current flight engineer certificate. For each airplane type certificated after January 1, 1964, the requirement for a flight engineer is determined under the

type certification requirements of §25.1523.

[Doc. No. 5025, 30 FR 6067, Apr. 29, 1965]

§ 121.389 Flight navigator and specialized navigation equipment.

- (a) No certificate holder may operate an airplane outside the 48 contiguous States and the District of Columbia, when its position cannot be reliably fixed for a period of more than 1 hour, without—
- (1) A flight crewmember who holds a current flight navigator certificate; or
- (2) Specialized means of navigation approved in accordance with §121.355 which enables a reliable determination to be made of the position of the airplane by each pilot seated at his duty station.
- (b) Notwithstanding paragraph (a) of this section, the Administrator may also require a flight navigator or special navigation equipment, or both, when specialized means of navigation are necessary for 1 hour or less. In making this determination, the Administrator considers—
 - (1) The speed of the airplane;
- (2) Normal weather conditions en route:
 - (3) Extent of air traffic control;
 - (4) Traffic congestion;
- (5) Area of navigational radio coverage at destination;
 - (6) Fuel requirements;
- (7) Fuel available for return to point of departure or alternates;
- (8) Predication of flight upon operation beyond the point of no return; and
- (9) Any other factors he determines are relevant in the interest of safety.
- (c) Operations where a flight navigator or special navigation equipment, or both, are required are specified in the operations specifications of the air carrier or commercial operator.

[Doc. No. 10204, 37 FR 6464, Mar. 30, 1972, as amended by Amdt. 121–178, 47 FR 13316, Mar. 29, 1982]

§121.391 Flight attendants.

- (a) Each certificate holder shall provide at least the following flight attendants on each passenger-carrying airplane used:
- (1) For airplanes having a maximum payload capacity of more than 7,500